DOCKET NO.: NOVA-0076                                    PATENT

#5

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Michael S. Dobres, Aidyn Mouradov and
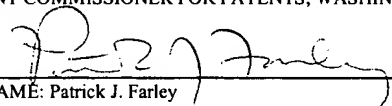Hong Zhang

Serial No.: 09/911,588                    Group Art Unit: TBA

Filing Date: July 24, 2001                Examiner: TBA

For:   Transformation of Plants by Electroporation of Cultured Explants

DATE OF DEPOSIT: _December 20 2001_
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STATEMENT TO SUPPORT FILING AND SUBMISSION IN ACCORDANCE
WITH 37 CFR §§ 1.821 THROUGH 1.825


☒      I hereby state, in accordance with the requirements of 37 C.F.R. §1.821(f), that the
contents of the paper and computer readable copies of the Sequence Listing, submitted
in accordance with 37 CFR §1.821(c) and (e), respectively are the same.

☒      I hereby state that the submission filed in accordance with 37 CFR §1.821(g) does not
include new matter.

☐      I hereby state that the submission filed in accordance with 37 CFR §1.821(h) does not
include new matter or go beyond the disclosure in the international application as filed.

☐      I hereby state that the amendments, made in accordance with 37 CFR §1.825(a),
included in the substitute sheet(s) of the Sequence Listing are supported in the
application, as filed, at pages _____. I hereby state that the substitute sheet(s) of the
Sequence Listing does (do) not include new matter.

# RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _09/911,588_

Source: _OIPE_

Date Processed by STIC: _08/02/2001_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

## Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.
Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO).
Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
http://www.uspto.gov/web/offices/pac/checker

# Raw Sequence Listing Error Summary

**ERROR DETECTED**     **SUGGESTED CORRECTION**     **SERIAL NUMBER:** 09/911,588

**ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE**

1\_\_\_\_Wrapped Nucleics    The number/text at the end of each line "wrapped" down to the next line. This may occur if your file
     Wrapped Aminos    was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will
      prevent "wrapping."

2\_\_\_\_Invalid Line Length    The rules require that a line not exceed 72 characters in length. This includes white spaces.

3\_\_\_\_Misaligned Amino    The numbering under each 5$^{th}$ amino acid is misaligned. Do not use tab codes between numbers;
     Numbering    use space characters, instead.

4\_\_\_\_Non-ASCII       The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please
      ensure your subsequent submission is saved in ASCII text.

5\_\_\_\_Variable Length       Sequence(s)\_\_\_\_contain n's or Xaa's representing more than one residue. Per Sequence Rules,
      each n or Xaa can only represent a single residue. Please present the maximum number of each
      residue having variable length and indicate in the <220>-<223> section that some may be missing.

6\_\_\_\_PatentIn 2.0       A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
     "bug"       sequences(s) _____. Normally, PatentIn would automatically generate this section from the
      previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to
      the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for
      Artificial or Unknown sequences.

7\_\_\_\_Skipped Sequences    Sequence(s) \_\_\_\_\_ missing. If intentional, please insert the following lines for each skipped sequence:
     (OLD RULES)       (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
      (i)       SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
      (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
      This sequence is intentionally skipped

      Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8\_\_\_\_Skipped Sequences    Sequence(s) \_\_\_\_\_ missing. If intentional, please insert the following lines for each skipped sequence.
     (NEW RULES)       <210> sequence id number
      <400> sequence id number
      000

9\_\_\_\_Use of n's or Xaa's    Use of n's and/or Xaa's have been detected in the Sequence Listing.
     (NEW RULES)       Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
      In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10\_\_\_\_Invalid <213>       Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or
     Response       scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or
      is Artificial Sequence

11\_\_✓\_Use of <220>       Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses.
      Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or
      "Unknown." Please explain source of genetic material in <220> to <223> section.
      (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)

12\_\_\_\_PatentIn 2.0       Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file,
     "bug"       resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence
      listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

AMC – Biotechnology Systems Branch – 06/04/2001

**The types of errors shown exist <u>throughout</u> the Sequence Listing. Please check
subsequent sequences for similar errors.**

OIPE

RAW SEQUENCE LISTING          DATE: 08/02/2001
PATENT APPLICATION:   US/09/911,588      TIME: 14:25:48

Input Set : A:\nova76.ST25.txt
Output Set: N:\CRF3\08022001\I911588.raw

```
      3 <110> APPLICANT: Dobres, Michael S.
      4        Mouradov, Aidyn
      5        Zhang, Hong
      7 <120> TITLE OF INVENTION: TRANSFORMATION OF PLANTS BY ELECTROPORATION OF CULTURED
EXPLANTS
      9 <130> FILE REFERENCE: NOVA-0076
C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/911,588
C--> 11 <141> CURRENT FILING DATE: 2001-07-24
     11 <160> NUMBER OF SEQ ID NOS: 10
     13 <170> SOFTWARE: PatentIn version 3.1
     15 <210> SEQ ID NO: 1
     16 <211> LENGTH: 21
     17 <212> TYPE: DNA
C--> 18 <213> ORGANISM: artificial      Errored
W--> 20 <220> FEATURE:
W--> 20 <223> OTHER INFORMATION:
     20 <400> SEQUENCE: 1
     21 agctgtgctc gacgttgtca c
     24 <210> SEQ ID NO: 2
     25 <211> LENGTH: 20
     26 <212> TYPE: DNA
C--> 27 <213> ORGANISM: artificial
W--> 29 <220> FEATURE:
W--> 29 <223> OTHER INFORMATION:
     29 <400> SEQUENCE: 2
     30 aatcgggagc ggcgataccg                                     20
     33 <210> SEQ ID NO: 3
     34 <211> LENGTH: 21
     35 <212> TYPE: DNA
C--> 36 <213> ORGANISM: artificial
W--> 38 <220> FEATURE:
W--> 38 <223> OTHER INFORMATION:
     38 <400> SEQUENCE: 3
     39 cgtggtgatg tggagtattg c                                   21
     42 <210> SEQ ID NO: 4
     43 <211> LENGTH: 19
     44 <212> TYPE: DNA
C--> 45 <213> ORGANISM: artificial
W--> 47 <220> FEATURE:
W--> 47 <223> OTHER INFORMATION:
     47 <400> SEQUENCE: 4
     48 ttgcagcaga aaagccgcc                                      19
     51 <210> SEQ ID NO: 5
     52 <211> LENGTH: 21
     53 <212> TYPE: DNA
C--> 54 <213> ORGANISM: artificial
W--> 56 <220> FEATURE:
W--> 56 <223> OTHER INFORMATION:
```

Does Not Comply
Corrected Diskette Needed

A description is mandatory in field 223 when the response in field 213 is Artificial or Artificial Sequence.

The types of errors shown exist <u>throughout</u> the Sequence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING                         DATE: 08/02/2001
PATENT APPLICATION:  US/09/911,588           TIME: 14:25:48

Input Set : A:\nova76.ST25.txt
Output Set: N:\CRF3\08022001\I911588.raw

```
       56 <400> SEQUENCE: 5
       57 ggaaagcttc ggatttggag c                                        21
       60 <210> SEQ ID NO: 6
       61 <211> LENGTH: 32
       62 <212> TYPE: DNA
C--> 63 <213> ORGANISM: artificial
W--> 65 <220> FEATURE:
W--> 65 <223> OTHER INFORMATION:
       65 <400> SEQUENCE: 6
       66 cggctgcagc gtctgaaata aaacaataga ac                             32
       69 <210> SEQ ID NO: 7
       70 <211> LENGTH: 22
       71 <212> TYPE: DNA
C--> 72 <213> ORGANISM: artificial
W--> 74 <220> FEATURE:
W--> 74 <223> OTHER INFORMATION:
       74 <400> SEQUENCE: 7
       75 tgaggatcct ttcgcatgat tg                                        22
       78 <210> SEQ ID NO: 8
       79 <211> LENGTH: 20
       80 <212> TYPE: DNA
C--> 81 <213> ORGANISM: artificial
W--> 83 <220> FEATURE:
W--> 83 <223> OTHER INFORMATION:
       83 <400> SEQUENCE: 8
       84 ttggtacccc agagtcccgc                                           20
       87 <210> SEQ ID NO: 9
       88 <211> LENGTH: 25
       89 <212> TYPE: DNA
C--> 90 <213> ORGANISM: artificial
W--> 92 <220> FEATURE:
W--> 92 <223> OTHER INFORMATION:
       92 <400> SEQUENCE: 9
       93 tgtggcattt attgaaatgg cactg                                     25
       96 <210> SEQ ID NO: 10
       97 <211> LENGTH: 29
       98 <212> TYPE: DNA
C--> 99 <213> ORGANISM: artificial
W--> 101 <220> FEATURE:
W--> 101 <223> OTHER INFORMATION:
      101 <400> SEQUENCE: 10
      102 ctatatctag acatcgtaat tttaagacg                                 29
```

file://C:\CRF3\Outhold\VsrI911588.htm                              8/2/01

**VERIFICATION SUMMARY**
PATENT APPLICATION:  US/09/911,588

DATE: 08/02/2001
TIME: 14:25:49

Input Set : A:\nova76.ST25.txt
Output Set: N:\CRF3\08022001\I911588.raw

```
L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:18 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:1
L:20 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:20 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:27 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:2
L:29 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:29 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:36 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3
L:38 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:38 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:45 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4
L:47 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:47 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:54 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5
L:56 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:56 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:63 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6
L:65 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:65 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:72 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7
L:74 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:74 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:81 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:8
L:83 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:83 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:90 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:9
L:92 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:92 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
L:99 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10
L:101 M:258 W: Mandatory Feature missing, <220> FEATURE:
L:101 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:
```